

Message

From: Craig Bias [cbias@remwerks.com]
Sent: 4/29/2021 4:44:23 PM
To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) [derek.j.robinson1@navy.mil]; Praskins, Wayne [Praskins.Wayne@epa.gov]
CC: Hays, David C Jr CIV USARMY CENWK (USA) [David.C.Hays@usace.army.mil]; Liscio, Matthew P CIV SEA 04, NAVSEA DET RASO [matthew.liscio@navy.mil]
Subject: RE: HPNS Navy RESARD BUILD Results
Attachments: HPNS BUILD Co_dir ing_walls_Ex0_21Apr21_DCFPAK.bld

Here is an input file for Co-60 to check our DCFs.

For clarification on a couple things today regarding Equation E.2 in BUILD manual.

- $D(t)$ is not an instantaneous direction ingestion dose, but rather an integrated dose over the 26 years.
- $Q(t)$ is basically the total source activity and is 100% fixed. That is the input activity concentration ($2.25E+05$ pCi/m² for Co-60) times the total contaminated area (~ 43 m²) or ~ 17.7 pCi for Co-60.
- Since the ingestion DCF and SF are dose per unit intake, we need to redefine the quantity in Column M (estimated activity, pCi). That is the calculated unit intake (pCi) and quantitatively is (24 ED Fin Fi) ERI fr $Q(t)$ in Eqn E.2. It is not just $Q(t)$.
- Similarly, since the external DCF and SF are dose per unit time-integrated activity concentration, we need to redefine the quantity in Column W (estimated activity concentration, pCi/m²). That is the calculated unit time-integrated activity concentration (1/yr/pCi/m²) if we use the surface DCFs. RESRAD is actually assuming the source term is a volume source that is 0.01 cm thick and uses Eqn F.1 and the volume DCFs. To calculate W, I guess we could divide the external dose by the volume DCFs to get the unit time-integrated activity concentration (1/yr/pCi/g) and then multiply by the soil volume SFs, but it should be a similar result.

Craig

From: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) <derek.j.robinson1@navy.mil>
Sent: Thursday, April 29, 2021 11:11 AM
To: Praskins, Wayne <Praskins.Wayne@epa.gov>
Cc: Hays, David C Jr CIV USARMY CENWK (USA) <David.C.Hays@usace.army.mil>; Craig Bias <cbias@remwerks.com>
Subject: RE: HPNS Navy RESARD BUILD Results

Yes, please do. I encourage the information exchange.

I included Craig on this response, so that he knows to expect your call.

Derek

From: Praskins, Wayne <Praskins.Wayne@epa.gov>
Sent: Thursday, April 29, 2021 8:41 AM
To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) <derek.j.robinson1@navy.mil>
Cc: Hays, David C Jr CIV USARMY CENWK (USA) <David.C.Hays@usace.army.mil>
Subject: [Non-DoD Source] RE: HPNS Navy RESARD BUILD Results

Derek –

Thanks for setting up this morning's call. To keep things moving, is it OK for Dave to call Craig Bias if he has additional questions?

Wayne Praskins | Superfund Project Manager

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75 Hawthorne St. (SFD-7-3)
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From: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) <derek.j.robinson1@navy.mil>
Sent: Tuesday, April 27, 2021 12:49 PM
To: Praskins, Wayne <Praskins.Wayne@epa.gov>
Cc: Hays, David C Jr CIV USARMY CENWK (USA) <David.C.Hays@usace.army.mil>
Subject: RE: HPNS Navy RESARD BUILD Results

Thanks Wayne and Dave! I sent the follow-up meeting request and will let you know.

From: Praskins, Wayne <Praskins.Wayne@epa.gov>
Sent: Tuesday, April 27, 2021 12:05 PM
To: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) <derek.j.robinson1@navy.mil>
Cc: Hays, David C Jr CIV USARMY CENWK (USA) <David.C.Hays@usace.army.mil>
Subject: [Non-DoD Source] HPNS Navy RESARD BUILD Results

Derek –

Dave Hays and I had a chance to talk about last week's Navy building RG submittal this morning. Dave has a question or two he would like to ask and should be able to join us this Thursday; I just forwarded your invite.

I don't expect we'll be able to have a detailed discussion on Thursday and would like to schedule a followup call for next week. Dave is in training Monday thru mid-day Thursday; is your group available for a followup call Thursday, 5/6 between noon and 2 PDT? I'm copying Dave on this email.

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